

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 41, ADD claims 46-48 and CANCEL claims 43-45 in accordance with the following:

1-39. (CANCELLED)

40. (CURRENTLY AMENDED) A method of channel searching for a digital television receiver, comprising:

~~receiving a digital television transport stream which includes audio, video, and program information;~~

~~extracting the program information from the received transport stream;~~

~~storing the extracted program information in a storage;~~

~~accessing the storage to generate a channel list based on the stored program information, wherein the channel list comprises at least one main channel number and the at least one main channel number has one corresponding sub-channel number in the received transport stream; and~~

receiving a radio frequency (RF) digital broadcast signal;

converting the received RF signal into a baseband signal;

decoding the converted baseband signal to reconstruct a digital broadcast transport stream which includes audio data, video data and program information;

extracting the audio data, the video data and the program information from the reconstructed digital broadcast transport stream;

processing the audio data to be output as sound;

processing the video data to be output on a screen;

storing the extracted program information in a storage;

accessing the storage to generate a channel list based on the stored program information;

wherein the channel list comprises at least one main channel number and the at least one main channel number has at least one corresponding sub-channel number in the received

transport stream; and

navigating the channel list to search the sub-channel a channel number,

wherein if the at least the one main channel number has at least one corresponding sub-channel number in the received transport stream, the sub-channel number can be listed after the at least one main channel number wherein the channel list can be accessed according to a listing sequence comprising main channel numbers and respective sub-channel numbers

wherein when the at least one main channel number has at least one corresponding sub-channel number in the received transport stream, the at least one sub-channel number is listed after the at least one main channel number;

wherein the channel list is navigated according to a listing sequence comprising the at least one main channel numbers and corresponding sub-channel numbers respectively.

41. (PREVIOUSLY PRESENTED) The method of claim 40, wherein the channel list can be navigated using Program Specific Information (PSI).

42. (PREVIOUSLY PRESENTED) The method of claim 40, wherein the listing sequence can be determined based on proximity between main channel numbers to allow the main channel number to be listed with at least one upper close channel number or at least one lower close channel number.

43-45. (CANCELLED)

46. (NEW) The method of claim 40, wherein the channel list is navigated in vertical and/or horizontal directions.

47. (NEW) The method of claim 40, wherein the sub-channel numbers related to a main channel number are displayed as a group in the same row as the main channel number.

48. (NEW) The method of claim 40, further comprising:
receiving a command to navigate the channel list; and
displaying channel numbers in the channel list in a numeric order.